

REMARKS

The Applicants appreciate the thorough examination of the present application that is reflected in the final Official Action of April 20, 2006. In particular, the Applicants appreciate the withdrawal of all rejections from the earlier Office Action of November 2, 2005. In response, the Applicants will show in the following remarks that all claims are patentable over the cited art. A Notice of Allowance is thus respectfully requested in due course.

Claim 1 Is Patentable Over The Combination Of Dugan And Onyeabor

Claim 1 has been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over U.S. Patent No. 6,363,411 to Dugan et al. ("Dugan") in view of U.S. Patent No. 6,631,512 to Onyeabor ("Onyeabor"). In response, the Applicants will show that Claim 1 is patentable over Dugan for at least the reasons discussed below.

In particular, Claim 1 recites a method of dynamically redeploying services in a computing network, the method including:

- receiving a redeployment trigger for a selected web service wherein the selected web service includes executable code;
- determining one or more network locations where the selected web service including the executable code has been deployed from its original location at an origin server;
- programmatically removing the selected web service including the executable code from the network locations and the origin server; and
- programmatically replacing the selected web service at the network locations and the origin server.

The Applicants respectfully submit that the combination of Dugan and Onyeabor fails to teach or suggest redeploying web services including executable code in a computing network as recited in Claim 1.

As discussed in the Manual Of Patent Examining Procedure (MPEP), three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there

must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Moreover, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *See*, MPEP, Sec. 2143.

In particular, Dugan is related to "telecommunications networks" (col. 1, lines 17-18) as opposed to a computing network as recited in Claim 1. In rejecting Claim 1, the Office Action cites Column 20, lines 14-26 of Dugan. Regarding the recitation of "a selected web service", portions of Dugan cited by the Office Action state that:

These service node profiles (e.g., Table 1) and service profiles (e.g., Table 2) are input to SA and stored therein to enable automatic tracking of: 1) the capabilities of each service node, i.e., how many computers and SLEE(s), and the resource capacity of each; 2) which services and data are to be deployed to which service nodes and when; and, 3) the configuration of service execution, i.e., at which times an SLP should run persistently versus on-demand, for example. The capabilities of each node and computer in the network is maintained, so that simple and complex business rules governing data/service distribution, data/service activation and data/service removal may be applied to optimize the execution of services on IDNA/NGIN service nodes. (Emphasis added.)

Dugan, col. 20, lines 14-26. The "services" of Dugan, however, are discussed as follows:

The present invention is directed to an intelligent network designed to perform intelligent call processing services for any type of call received at a resource complex or switching platform. (Emphasis added.)

Dugan, col. 5, line 66 to col. 6, line 2. Dugan thus relates to call processing services as opposed to web services.

Accordingly, Dugan fails to teach or suggest redeploying web services in a computing network including programmatically removing a selected web service including executable code and programmatically replacing the selected web service as recited in Claim 1. Moreover, Dugan also fails to teach or suggest receiving a redeployment trigger. In addition, the Office Action concedes that:

Dugan fails to teach the limitation further including the use of a selected web service wherein the selected web service includes executable code.

Office Action, page 3. For at least the reasons discussed above, Dugan thus fails to teach or suggest:

- 1.) removing a selected web service including executable code;
- 2.) replacing the selected web service; and/or
- 3.) receiving a redeployment trigger.

Onyeabor fails to provide the missing teachings. In support of the rejection, the Office Action states that:

Onyeabor teaches Web page development, deployment, and execution conducive to database access and manipulation over the Internet (see Abstract). Onyeabor teaches the use of the deployment of a web page with that web page including executable code (col. 6, lines 14-20, col. 16, lines 35-44).

Office Action, page 3. As discussed in Onyeabor:

the method and apparatus of the present invention include a Web page development tool which enables a developer to create a Web page document which includes executable code, thus eliminating the need to download foreign executables during display and manipulation of a page. This virtually eliminates the risk that malicious code will be downloaded and allowed to wreak havoc on the client machine.

Onyeabor, col. 6, lines 14-20. Onyeabor further states that:

after creation of a Web page by Web page development computer 110, a developer may then request that computer 110 "deploy" the new Web page. "Deployment" of a Web page refers to the act of sending the page to a server which will then provide access to the page to client computers via the Internet. Web page development computer may send the Web page to the server via the Internet, a LAN, a WAN, any other type of optical, wireless, or wired link (or links), or via a tangible data storage medium.

Onyeabor, col. 16, lines 35-44. Onyeabor, however, fails to teach or suggest:

- 1.) removing a selected web service including executable code;
- 2.) replacing the selected web service; and/or
- 3.) receiving a redeployment trigger.

As neither of the cited references (taken alone or in combination) teaches or suggest any of the three claim recitations noted above, the combination of Dugan and Onyeabor fails to teach or suggest the

method of Claim 1. Stated in other words, Dugan and Onyeabor fail teach or suggest all the claim limitations as required by MPEP Sec. 2143.

In addition, there is no motivation to selectively combine elements of Dugan and Onyeabor to somehow teach or suggest the method of Claim 1. In particular, there is no motivation to combine aspects of Web page development/deployment/execution of Onyeabor (*see*, Onyeabor, col. 1, lines 8-11) with telecommunications service processing of Dugan (*see*, Dugan, col. 1, lines 17-22). Moreover, there is no reasonable expectation that aspects of Web page development/deployment/execution from Onyeabor can be successfully substituted for elements of the telecommunications switching network of Dugan.

Accordingly, the Applicants respectfully submit that the combination of Dugan and Onyeabor fails to teach or suggest the recitations of Claim 1 and that Claim 1 is thus patentable. The Applicants further submit that Claims 18 and 19 are patentable for reasons similar to those discussed above with regard to Claim 1. In addition, Dependent Claims 2-17 and 20-23 are patentable at least as per the patentability of Claims 1, 18, and 19 from which they depend.

If any rejections based on Dugan and Onyeabor should be maintained, the Applicants respectfully request that the Examiner specifically point out portions of the cited art that teach or suggest each of: removing a selected web service including executable code; replacing the selected web service; and receiving a redeployment trigger.

Various Dependent Claims Are Separately Patentable

As discussed above, dependent Claims 2-17 and 20-23 are patentable at least as per the patentability of Claims 1, 18, and 19 from which they depend. Various of these dependent claims are also independently patentable.

Dependent Claim 2, for example, depends from Claim 1 and thus includes all recitations of Claim 1 as discussed above. In addition, Claim 2 recites that the redeployment trigger comprises a redeployment request from the origin server. Portions of Dugan cited with respect to Claim 2 state that:

These service node profiles (e.g., Table 1) and service profiles (e.g., Table 2) are input to SA and stored therein to enable automatic tracking of: 1) the capabilities of each service node, i.e., how many computers and SLEE(s), and the resource capacity of each; 2) which services and data are to be deployed to which service nodes and when; and, 3) the configuration of service execution....

Dugan, col. 20, lines 14-20. Dugan, however, fails to teach or suggest a redeployment request, much less, a redeployment request from an origin server which is the original location of the web service being replaced (as defined in Claim 1). Moreover, nothing from Onyeabor is cited with respect to the additional recitations of Claim 2. Accordingly, Claim 2 is separately patentable over the combination of Dugan and Onyeabor. In addition, Claims 20 and 21 are separately patentable for reasons similar to those discussed above with respect to Claim 2.

Dependent Claim 3, for example, depends from Claim 1 and thus includes all recitations of Claim 1 as discussed above. In addition, Claim 3 recites sending the redeployment trigger when the selected web service including the executable code is to be revised. Portions of Dugan cited with respect to Claim 3 state that:

The capabilities of each node and computer in the network is maintained, so that simple and complex business rules governing data/service distribution, data/service activation and data/service removal may be applied to optimize the execution of services on IDNA/NGIN service nodes.

Dugan, col. 20, lines 22-26. While Dugan discusses business rules governing data/service distribution, activation, and removal, Dugan fails to teach or suggest a redeployment trigger, much less sending a redeployment trigger when a selected web service is to be revised. Moreover, nothing from Onyeabor is cited with respect to the additional recitations of Claim 3. Accordingly, Claim 3 is separately patentable over the combination of Dugan and Onyeabor. In addition, dependent Claims 22 and 23 are separately patentable for reasons similar to those discussed above with respect to Claim 3.

Dependent Claim 24 depends from Claim 1 and thus includes all recitations of Claim 1 as discussed above. In addition, Claim 24 recites:

wherein determining one or more network locations where the selected web service has been deployed includes determining all of the network locations where the selected web service has been deployed;

wherein programmatically removing the selected web service from the network locations includes programmatically removing the selected web service from all of the network location where the web service has been deployed; and

wherein programmatically replacing the selected web service at the network locations includes programmatically replacing the selected web service at all of the network locations where the web service has been deployed.

In contrast, Dugan discusses a "service support provisioning function ... with rules based on ... load balancing among service nodes, network call routing efficiencies, and service demand." Dugan, col. 20, lines 27-32. Accordingly, Dugan fails to teach or suggest removing a selected web service from all network locations where the web service has been deployed and/or replacing the selected web service at all of the network locations where the web service has been deployed. Moreover, nothing from Onyeabor is cited with respect to the additional recitations of Claim 24. Claim 24 is thus separately patentable over the combination of Dugan and Onyeabor. In addition, dependent Claims 26 and 28 are separately patentable for reasons similar to those discussed above with respect to Claim 24.

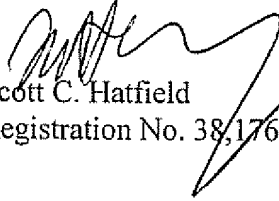
Dependent Claim 25 depends from Claim 1 and thus includes all recitations of Claim 1 as discussed above. In addition, Claim 25 recites that programmatically replacing the selected web service at the network locations comprises replacing the selected web service with an updated web service including updated executable code. As discussed above with respect to Claim 24, Dugan discusses provisioning based on load balancing, efficiencies, and demand. *See*, Dugan, col. 20, lines 27-32. Dugan thus fails to teach or suggest replacing a selected web service with an updated web service including updated executable code. Moreover, nothing from Onyeabor is cited with respect to the additional recitations of Claim 25. Accordingly, dependent Claim 25 is separately patentable over the combination of Dugan and Onyeabor. In addition, dependent Claims 27 and 29 are separately patentable for reasons similar to those discussed above with respect to Claim 25.

In re Peter J. Brittenham
App.Ser.No. 09/864,608
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CONCLUSION

Accordingly, the Applicants submit that all pending claims in the present application are in condition for allowance, and allowance of all claims is respectfully requested in due course.

Respectfully submitted,


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